



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
31.03.2004 Bulletin 2004/14

(51) Int Cl.7: **G06F 17/60**

(43) Date of publication A2:
02.01.2004 Bulletin 2004/01

(21) Application number: **03006814.2**

(22) Date of filing: **26.03.2003**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IT LI LU MC NL PT RO SE SI SK TR
 Designated Extension States:
AL LT LV MK

(72) Inventors:
 • **Goodman, Joshua Theodore**
Redmond, Washington 98052 (US)
 • **Rounthwaite, Robert L.**
Fall City, Washington 98024 (US)

(30) Priority: **26.06.2002 US 180565**

(74) Representative: **Grünecker, Kinkeldey,**
Stockmair & Schwanhäusser Anwaltssozietät
Maximilianstrasse 58
80538 München (DE)

(71) Applicant: **MICROSOFT CORPORATION**
Redmond, Washington 98052-6399 (US)

(54) **SPAM detector with challenges**

(57) A system and method facilitating detection of unsolicited e-mail message(s) with challenges is provided. The invention includes an e-mail component and a challenge component. The system can receive e-mail message(s) and associated probabilities that the e-mail message(s) are spam. Based, at least in part, upon the associated probability, the system can send a challenge

to a sender of an e-mail message. The challenge can be an embedded code, computational challenge, human challenge and/or micropayment request. Based, at least in part, upon a response to the challenge (or lack of response), the challenge component can modify the associated probability and/or delete the e-mail message.

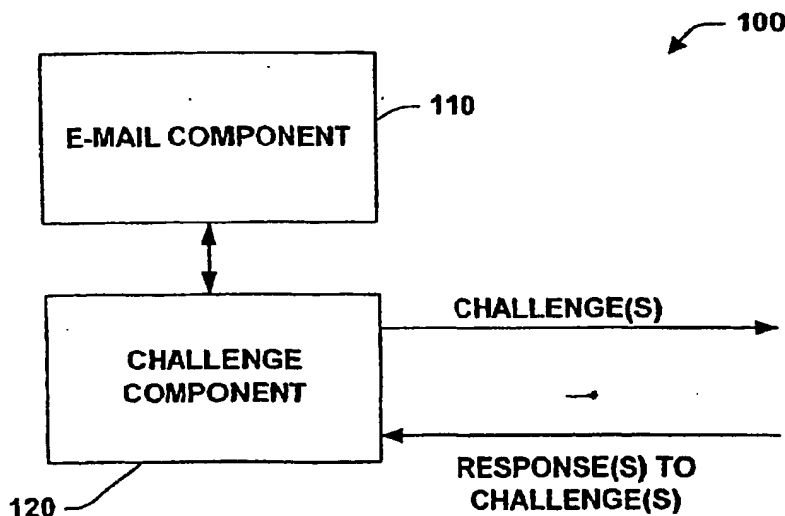


FIG. 1

EP 1 376 427 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 03 00 6814

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)
D,Y	US 6 161 130 A (HECKERMAN DAVID E ET AL) 12 December 2000 (2000-12-12) * abstract * * column 1, line 10 - line 14 * * column 4, line 40 - line 49 * * column 8, line 40 - line 66 * * claim 1 *	1-36	G06F17/60
Y	WO 99 10817 A (COBB CHRISTOPHER ALAN) 4 March 1999 (1999-03-04) * abstract * * page 3, line 4 - line 17 * * page 7, line 19 - page 8, line 10 * * page 16, line 19 - line 23 * * page 11, line 18 - line 21 * * page 28, line 27 - line 30 * * figure 7 *	1-36	
Y	US 6 112 227 A (HEINER JEFFREY NELSON) 29 August 2000 (2000-08-29) * abstract * * column 2, line 1 - line 10 * * column 3, line 58 - column 4, line 1 * * column 4, line 15 - line 30 * * figure 2 *	1-36	TECHNICAL FIELDS SEARCHED (Int.CI.7) G06F
A	JULIAN BYRNE: "MY Spamblock" NEWSGROUP CITATION, 'Online! 19 January 1997 (1997-01-19), XP002267503 news.admin.net-abuse.email Retrieved from the Internet: <URL:http://www.google.com/groups?hl=en&lr= =&ie=UTF-8&oe=UTF-8&selm=32E1A4FD.41C6%40a ny.where&rnum=1> 'retrieved on 2004-01-20! * the whole document *	1-36	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21 January 2004	Examiner Rosster, T
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03 02 (p.4/01)



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 03 00 6814

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	<p>DAVID SKOLL: "How to make sure a human is sending you mail"</p> <p>NEWSGROUP CITATION, 'Online!</p> <p>17 November 1997 (1997-11-17), XP002267504</p> <p>news.admin.net-abuse.usenet</p> <p>Retrieved from the Internet:</p> <p><URL:http://groups.google.ca/groups?hl=en&lr=&ie=UTF-8&oe=UTF-8&selm=561uge%246on%40bertrand.ccs.carleton.ca></p> <p>'retrieved on 2004-01-20!</p> <p>* the whole document *</p>	1-36	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		21 January 2004	Rossier, T
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone</p> <p>Y : particularly relevant if combined with another document of the same category</p> <p>A : technological background</p> <p>O : non-written disclosure</p> <p>P : intermediate document</p> <p>T : theory or principle underlying the invention</p> <p>E : earlier patent document, but published on, or after the filing date</p> <p>D : document cited in the application</p> <p>L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03 92 (P/MC01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 00 6814

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

21-01-2004

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 6161130	A	12-12-2000	EP WO	1090368 A1	11-04-2001
				9967731 A1	29-12-1999
WO 9910817	A	04-03-1999	US WO	6199102 B1	06-03-2001
				9910817 A1	04-03-1999
US 6112227	A	29-08-2000	NONE		

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.